8052788064

Attorney Docket No: MCS-058-99

REMARKS

In response to the final Office Action dated May 6, 2004 (hereinafter "the Office Action), new claims 95 -98 have been added. Claims 11 and 93 have been amended. Therefore, claims 1-20 and 93-98 are now in the case. Reexamination and reconsideration of the amended application are requested.

Rebuttal to "Response to Amendment and Arguments"

For claims 1, 11 and 16, the Office Action maintained that Wakitani discloses "motion prediction values of the respective pixel of the motion prediction map" (col. 14, lines 28-30). Moreover, the Office Action stated due to the broad limitation, "one skilled in the art can reasonably interpret that motion prediction values of the pixel are the prediction values of the pixel since nowhere in the claim specifically stated that prediction values of pixel except/excluding/but no including motion prediction values of the pixel."

Applicants rebut this argument by pointing out that Wakitani is lacking the Applicants' claimed feature of providing <u>multiple predictions</u> of a <u>pixel value</u> for <u>each pixel</u> in an image sequence. In other words, the Applicants' claimed invention makes multiple predictions as to the value of a pixel, and this is done for each pixel in the image sequence. Based on these multiple predictions, the Applicants' claimed invention determines whether the pixel is a foreground pixel or a background pixel.

Wakitani merely discloses providing two types of values about a prediction, not a pixel. These prediction values are indicative of the usefulness of the prediction (which happens to be motion prediction). Note that these prediction values are not predictions about the movement or motion of a pixel, but merely values that indicate whether a prediction is good or bad. The actual motion prediction is a <u>single</u> prediction that predicts a location to which a pixel is moving. Once this prediction is made, the two types of prediction values are used to determine the effectiveness of that single prediction. Both of these values or indicators indicate the worth of the prediction about

pixel value.

8052788064

as to where a target pixel is moving, and are not the same as making prediction about a

The Applicants respectfully invite the Examiner to carefully reconsider the cited art as it is lacking the Applicants' claimed feature of providing <u>multiple predictions</u> of a pixel value for <u>each pixel</u> in an image sequence.

Section 112, First Paragraph Rejection

The Office Action rejected claim 93 under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. The Office Action maintained that the claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

In particular, the Office Action maintained that the Applicants' specification lacks "the limitation of a prediction module that provides at least two pixel value predictions for each of the plurality of pixels without using motion prediction" (emphasis in original).

In response, the Applicants have amended claim 93 to overcome this rejection. Based on the amendment to claim 93, the Applicants submit that the rejection of claim 93 under 35 U.S.C. § 112, first paragraph has been overcome.

Section 103(a) Rejections

The final Office Action rejected claims 1-7 and 9-19 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Sambonsugi et al. (U.S. Patent No. 6,335,985) in view of Wakitani (U.S. Patent No. 6,031,568). The Office Action stated that Sambonsugi et al. disclose all elements of the Applicants' claimed invention except that "Sambonsugi et al. does not clearly teach a prediction module that provides predictions for a value of each of the plurality of pixels." However, the Office Action stated that Wakitani "teaches object tracking (abstract) in sequence image (column 1, lines 6-10) further comprises a prediction module (FIG. 2, box 62) that provides predictions for a value of

Attorney Docket No: MCS-058-99

each of the plurality of pixels (motion prediction value and motion prediction maps for each of the plurality of the pixels (column 14, lines 25-39)". Therefore, the Office Action asserted that it would have been obvious to modify Sambonsugi's method of maintaining a background model for an image sequence according to Wakitani such that the combination would be able to predict motion values of each pixel and use them for motion mapping to predict the motion of the tracking object in the image sequence.

In response, the Applicants respectfully traverse these rejections based on the amendment to claim 11 and the following legal and technical analysis. The Applicants submit that the combination of Sambonsugi et al. and Wakitani lacks features of the Applicants' claimed invention. In particular, Sambonsugi et al. and Wakitani do not disclose, either explicitly or implicitly, the material claimed feature of providing multiple predictions of a pixel value for each pixel in an image sequence.

Further, Sambonsugi et al. and Wakitani fail to appreciate the advantages of this claimed feature. In addition, there is no technical suggestion or motivation disclosed in Sambonsugi et al. or Wakitani to define this claimed feature. Thus, the Applicants submit that the combination of Sambonsugi et al. and Wakitani cannot make obvious the Applicants' claimed feature of providing <u>multiple predictions</u> of a <u>pixel value</u> for <u>each</u> pixel in an image sequence.

To make a prima facie showing of obviousness, all of the claimed features of an Applicants' invention must be considered, especially when they are missing from the prior art. If a claimed feature is not disclosed in the prior art and has advantages not appreciated by the prior art, then no prima facie showing of obviousness has been made. The Federal Circuit Court has held that it was an error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Moreover, as stated in the MPEP, if a prior art reference does not disclose, suggest or provide any motivation for at least one claimed feature of an Applicants' invention, then a prima facie case of obviousness has not been established (MPEP §

Attorney Docket No: MCS-058-99

2142).

Independent Claims 1, 11 and 16

Independent claim 1 of the Applicants' claimed invention includes a system for maintaining a background model of an image sequence having a plurality of pixels. The system includes a pixel processing module that processes the image sequence on a pixel scale, and a prediction module that provides <u>predictions</u> for a <u>value</u> of <u>each</u> of the plurality of pixels. The system further includes at least one refinement module that processes the image sequence on a spatial scale other than the pixel scale.

Amended independent claim 11 of the Applicants' claimed invention includes a computer-readable medium having computer-executable modules including a pixel processing module that processes an image sequence on a pixel scale. The pixel processing module further includes a prediction module that provides at least two predictions of what value a particular pixel will be in a next frame of the image sequence to be processed and provides these predictions for each pixel within the image sequence, and at least one refinement module that processes the image sequence on a spatial scale other than the pixel scale.

Independent claim 16 of the Applicants' claimed invention includes a method for maintaining a background model of an image sequence having a plurality of pixels. The method includes processing the image sequence on a pixel scale so as to determine a current background model and provide an initial assignment for each of the plurality of pixels. The method further includes calculating <u>predictors</u> for a <u>value</u> of <u>each</u> of the plurality of pixels, and refining the pixel processing by processing on a spatial scale other that the pixel scale to further refine at least one of: (a) the current background model; (b) the initial pixel assignments.

The Applicants' claimed invention provides multiple predictions "about the <u>value</u> of a pixel in a subsequent frame" (specification, page 24, lines 4-5; emphasis added). This gives predictions of "what <u>value</u> a particular pixel will be in the next frame to be processed"

Attorney Docket No: MCS-058-99

Serial No.: 09/400,346

(specification, page 25, lines 7-9; emphasis added). These pixel value predictions are used to determine whether to classify a pixel as a foreground pixel or a background pixel (specification, page 26, lines 21-23). Thus, background maintenance is achieved by providing multiple predictions for a single value of a pixel is done for every pixel in an image sequence.

Conversely, as admitted in the Office Action, Sambonsugi et al. do not disclose a prediction module that provides predictions for a value of each of the plurality of pixels. The Applicants' arguments supporting this fact are contained in previous responses.

Wakitani adds nothing to the cited combination that would render the Applicants' claimed invention obvious. In contrast to the Applicants' claimed providing multiple predictions of a pixel value, Wakitani provides values that indicate the worth of a single location prediction of a pixel. In other words, Wakitani has two indicators that denote how likely it is that a pixel will be at the location predicted. In particular, one value or indicator in Wakitani is a correlation value, which is "an index of a degree of the approximation (col. 3, lines 9-10). Another one value or indicator is a "prediction value, which indicates a maximum probability at an existence prediction position of the moving-target at the next position represented by the prediction motion vector" (col. 6, lines 45-48; emphasis added). Both of these values or indicators indicate the worth of the prediction about as to where a target pixel is moving, and are not the same as making prediction about a pixel value.

Sambonsugi et al. and Wakitani also fail to appreciate or recognize the advantages of the Applicants' claimed feature of providing <u>multiple predictions</u> of a <u>pixel value</u> for <u>each pixel</u> in an image sequence. In particular, pixel value predictions allow the Applicants' claimed invention to maintain a "reasonably accurate representation of the background so that the background and the foreground can be distinguished in each frame of the image sequence" (specification, page 2, lines 12-15). The combination of Sambonsugi et al. and Wakitani fail to discuss or appreciate these advantages of the

Attorney Docket No: MCS-058-99

Applicants' claimed feature of providing <u>multiple predictions</u> of a <u>pixel value</u> for <u>each</u> <u>pixel</u> in an image sequence.

The Applicants' claimed invention also provides providing multiple predictions of a pixel value for each pixel in an image sequence. In contrast, Wakitani merely discloses performing motion prediction only on the pixels in the image that are being tracked ("target pixels"). The reason Wakitani does this is to know where to look for the pixels associated with the target they are tracking. In fact, "an important feature of the moving-target tracking apparatus according to the present invention resides in the point that . . . a motion of a target is predicted from the past motion of the target" (col. 6, lines 33-36). For example, if Wakitani selects "some player in a soccer game . . . as a target", then motion prediction only is performed for those pixels containing the soccer player (col. 7, lines 57-58). This is clear when it says that Wakitani "calculates a prediction motion vector as to a prediction for the target on the subsequent frame with respect to a translation of the target from the target position represented by the target position information" (col. 14, lines 18-22). Thus, Wakitani merely performs motion prediction on target pixels, which are a subset of all pixels in the image.

The combination of Sambonsugi et al. and Wakitani also both fail to appreciate or recognize the advantages of the Applicants' claimed feature of providing provides pixel value predictions for every pixel in an image. In particular, pixel value predictions allow the Applicants' claimed invention to maintain a "reasonably accurate representation of the background so that the background and the foreground can be distinguished in each frame of the image sequence" (specification, page 2, lines 12-15). Pixel value predictions for each pixel in an image allow the Applicants' claimed invention to classify each pixel in the image as either a background or a foreground pixel. The combination of Sambonsugi et al. and Wakitani fail to discuss or appreciate these advantages of the Applicants' claimed feature of providing provides pixel value predictions for every pixel in an image.

8052788064

Attorney Docket No: MCS-058-99

The Applicants, therefore, submit that obviousness cannot be established since the combination of Sambonsugi et al. and Wakitani fails to teach, disclose, suggest or provide any motivation for the Applicants' claimed feature of providing multiple predictions of a pixel value for each pixel in an image sequence. In addition to explicitly lacking this feature, the combination of Sambonsugi et al. and Wakitani also fail to implicitly disclose, suggest, or provide motivation for this feature. Further, the combination of Sambonsugi et al. and Wakitani fail to appreciate advantages of this claimed feature.

Therefore, as set forth in In re Fine and MPEP § 2142, the combination of Sambonsugi et al. and Wakitani does not render the Applicants' claimed invention obvious because each of the references is missing the material feature of the Applicants' claimed invention of providing multiple predictions of a pixel value for each pixel in an image sequence. Consequently, because a prima facie case of obviousness cannot be established due to the lack of "some teaching, suggestion, or incentive supporting the combination", the rejection must be withdrawn. ACS Hospital Systems. Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); MPEP 2143.01.

Accordingly, the Applicants respectfully submit that independent claims 1, 11 and 16 are patentable under 35 U.S.C. § 103(a) over Sambonsugi et al. in view of Wakitani based on the amendments to claim 11 and the legal and technical arguments set forth above and below. Moreover, claims 2-7, 9 and 10 depend from independent claim 1, claims 12-15 depends from amended independent claim 11, and claims 17-19 depend from independent claim 16 and are also nonobvious over Sambonsugi et al. in view of Wakitani (MPEP § 2143.03). The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claims 1-7 and 9-19.

The final Office Action rejected claim 93 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Sambonsugi et al. in view of Wakitani and further in

Attorney Docket No: MCS-058-99

view of Black et al. (U.S. Patent No. 5,802,203). The Office Action stated that Sambonsugi et al. and Wakitani disclose all elements of the Applicants' claimed invention except that "Sambonsugi et al. and Wakitani do not explicitly teach a prediction module that provides predictions without using motion prediction." However, the Office Action stated that Black et al. "teaches an image processing method wherein a prediction module that provides at least two pixel value predictions (predicted pixel brightness values at each pixel has nothing to do with motion prediction) (column 9, lines 19-37)." Therefore, the Office Action asserted that it would have been obvious to modify Sambonsugi's method of processing an image sequence according to Black et al. to further predict the brightness values of each pixel.

In response, the Applicants respectfully traverse these rejections based on the amendment to claim 93 and the following legal and technical analysis. The Applicants submit that the combination of Sambonsugi et al., Wakitani and Black et al. lacks a material feature of the Applicants' claimed invention. In particular, the combination does not disclose, either explicitly or implicitly, the material claimed feature of a prediction module that provides at least two predictions of a pixel value for each of the plurality of pixels.

Further, Sambonsugi et al., Wakitani and Black et al. fail to appreciate the advantages of this claimed feature. In addition, there is no technical suggestion or motivation disclosed in Sambonsugi et al., Wakitani or Black et al. to define this claimed feature. Thus, the Applicants submit that the combination of Sambonsugi et al., Wakitani and Black et al. cannot make obvious the Applicants' claimed feature of a prediction module that provides at least two predictions of a pixel value for each of the plurality of pixels.

Amended independent claim 93 of the Applicants' claimed invention includes a system for background maintenance of an image sequence having a plurality of pixels. The system includes a pixel processing module that processes the image sequence on a pixel scale. The pixel processing module further includes a prediction module that

Attorney Docket No: MCS-058-99

provides at least two predictions of a <u>pixel value</u> for <u>each</u> of the plurality of pixels, and at least one refinement module that processes the image sequence on a spatial scale different from the pixel scale.

As discussed above, Sambonsugi et al. and Wakitani are lacking this material claimed feature.

Black et al. add nothing to the cited combination that would render the Applicants' claimed invention obvious. In contrast to the Applicants' claimed prediction module that provides at least two predictions of a pixel value for each of the plurality of pixels, Black et al. merely disclose determining "new residual values" using "actual brightness values" and "updated predicted brightness values" (col. 9, lines 25-30). A predicted brightness value is used to compute the residual for a pixel. However, unlike the Applicants' claimed invention, Black et al. does not make two predictions about a value of a single pixel for every pixel in an image sequence.

Sambonsugi et al., Wakitani and Black et al. also fail to appreciate or recognize the advantages of the Applicants' claimed feature of a prediction module that provides at least two predictions of a pixel value for each of the plurality of pixels, as discussed above.

The Applicants, therefore, submit that obviousness cannot be established since the combination of Sambonsugi et al., Wakitani and Black et al. fails to teach, disclose, suggest or provide any motivation for the Applicants' claimed feature of a prediction module that provides at least two predictions of a pixel value for each of the plurality of pixels. In addition to explicitly lacking this feature, the combination of Sambonsugi et al., Wakitani and Black et al. also fails to implicitly disclose, suggest, or provide motivation for this feature. Further, the combination fails to appreciate advantages of this claimed feature.

Attorney Docket No: MCS-058-99

Therefore, as set forth In *In re Fine* and MPEP § 2142, the combination of Sambonsugi et al., Wakitani and Black et al. does not render the Applicants' claimed invention obvious because each of the references is missing the material feature of the Applicants' claimed invention of a prediction module that provides at least two predictions of a pixel value for each of the plurality of pixels. Consequently, because a prima facie case of obviousness cannot be established due to the lack of "some teaching, suggestion, or incentive supporting the combination", the rejection must be withdrawn. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); MPEP 2143.01.

Accordingly, the Applicants respectfully submit that amended independent claim 93 is patentable under 35 U.S.C. § 103(a) over Sambonsugi et al. in view of Wakitani and further in view of Black et al. based on the amendments to claim 93 and the legal and technical arguments set forth above and below. The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claim 93.

The final Office Action rejected claim 94 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Sambonsugi et al. in view of Wakitani and further in view of Talluri et al. (U.S. Patent No. 6,026,183). The Office Action stated that Sambonsugi et al. and Wakitani disclose all elements of the Applicants' claimed invention except that "Sambonsugi et al. and Wakitani do not clearly teach the concept of disclosing the concept of the predictions based on a actual history of pixel values for the predicted pixel and a predicted history of pixel values for the predicted pixel." However, the Office Action stated that Talluri et al. "teaches an image processing wherein using the prediction process (col. 13, lines 9-10) of an actual history of pixel values (actual pixel values) for the predicted pixel and a predicted history (predicted values) of pixel values for the predicted pixel (col. 13, lines 10-15)." Therefore, the Office Action asserted that it would have been obvious to modify Sambonsugi's method of processing an image sequence according to Talluri et al. to be able to perform motion compensation on the input frame in order to

• 09/06/2004 08:58

Attorney Docket No: MCS-058-99

improve processing.

In response, the Applicants respectfully traverse these rejections based on the following legal and technical analysis. The Applicants submit that the combination of Sambonsugi et al., Wakitani and Talluri et al. lacks a material feature of the Applicants' claimed invention. In particular, the combination does not disclose, either explicitly or implicitly, the material claimed feature of calculating a plurality of predictors to provide predictions of a value of each of the plurality of pixels, the predictions based on an actual history of pixel values for the predicted pixel and a predicted history of pixel values for the predicted pixel.

Further, Sambonsugi et al., Wakitani and Talluri et al. fail to appreciate the advantages of this claimed feature. In addition, there is no technical suggestion or motivation disclosed in Sambonsugi et al., Wakitani or Talluri et al. to define this claimed feature. Thus, the Applicants submit that the combination of Sambonsugi et al., Wakitani and Talluri et al. cannot make obvious the Applicants' claimed feature of calculating a plurality of predictors to provide predictions of a value of each of the plurality of pixels, the predictions based on an actual history of pixel values for the predicted pixel and a predicted history of pixel values for the predicted pixel.

Independent claim 94 of the Applicants' claimed invention includes a method for processing an image sequence having a plurality of pixels. The method includes processing the image sequence on a pixel scale to determine a current background model and provide initial assignments to each of the plurality of pixels. The method further includes calculating a plurality of predictors to provide predictions of a value of each of the plurality of pixels, the predictions based on an actual history of pixel values for the predicted pixel and a predicted history of pixel values for the predicted pixel. The method also includes refining the pixel processing by processing on a spatial scale other that the pixel scale to maintain a background model of the image sequence.

8052788064

Serial No.: 09/400,346

Attorney Docket No: MCS-058-99

As discussed above, Sambonsugi et al. and Wakitani are lacking this material claimed feature.

Talluri et al. add nothing to the cited combination that would render the Applicants' claimed invention obvious. In contrast to the Applicants' claimed calculating a plurality of predictors to provide predictions of a value of each of the plurality of pixels, the predictions based on an actual history of pixel values for the predicted pixel and a predicted history of pixel values for the predicted pixel, Talluri et al. merely disclose producing a "residual image" using a "predicted frame" and an "input frame" (col. 13, lines 9-11). In particular, Talluri et al. subtracts a predicted frame from the input frame to produce the residual image, which is the "difference between predicted and actual pixel values" (col. 13, lines 9-12). However, unlike the Applicants' claimed invention, Talluri et al. does not multiple predictions about a value of a single pixel for every pixel in an image sequence.

Sambonsugi et al., Wakitani and Talluri et al. also fail to appreciate or recognize the advantages of the Applicants' claimed feature of calculating a plurality of predictors to provide predictions of a value of each of the plurality of pixels, the predictions based on an actual history of pixel values for the predicted pixel and a predicted history of pixel values for the predicted pixel.

The Applicants, therefore, submit that obviousness cannot be established since the combination of Sambonsugi et al., Wakitani and Talluri et al. fails to teach, disclose, suggest or provide any motivation for the Applicants' claimed feature of calculating a plurality of predictors to provide predictions of a value of each of the plurality of pixels, the predictions based on an actual history of pixel values for the predicted pixel and a predicted history of pixel values for the predicted pixel. In addition to explicitly lacking this feature, the combination of Sambonsugi et al., Wakitani and Talluri et al. also fails to implicitly disclose, suggest, or provide motivation for this feature. Further, the combination fails to appreciate advantages of this claimed feature.

Attorney Docket No: MCS-058-99

Therefore, as set forth in In re Fine and MPEP § 2142, the combination of Sambonsugi et al., Wakitani and Talluri et al. does not render the Applicants' claimed invention obvious because each of the references is missing the material feature of the Applicants' claimed invention of calculating a plurality of predictors to provide predictions of a value of each of the plurality of pixels, the predictions based on an actual history of pixel values for the predicted pixel and a predicted history of pixel values for the predicted pixel. Consequently, because a prima facie case of obviousness cannot be established due to the lack of "some teaching, suggestion, or incentive supporting the combination", the rejection must be withdrawn. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); MPEP 2143.01.

LYON & HARRTTTTTTT

Accordingly, the Applicants respectfully submit that amended independent claim 94 is patentable under 35 U.S.C. § 103(a) over Sambonsugi et al. in view of Wakitani and further in view of Talluri et al. based on the legal and technical arguments set forth above. The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claim 94.

The Office Action rejected claims 8 and 20 under 35 U.S.C. § 103(a) as being unpatentable over the combination Sambonsugi et al. and Wakitani as applied to claim 7, and further in view of Jain et al. (U.S. Patent No. 6,263,091). The Office Action contended that the combination of Sambonsugi et al. and Wakitani discloses all elements of the Applicants' claimed invention except for disclosing speckle removal. However, the Office Action stated that Jain et al. disclose a technique to isolate foreground and background using speckle removal. Therefore, the Office Action asserted that it would have been obvious to use speckle removal as an enhancement technique because speckle removal is well known in the art to aid in the removal of noise, dirt, breaks and smudges in input images.

• 09/06/2004

Attomey Docket No: MCS-058-99

In response, the Applicants respectfully traverse these rejections based on the arguments above for independent claims 1 and 16. Based on the arguments, the Applicants respectfully submit that independent claims 1 and 16 are patentable under 35 U.S.C. § 103(a) over the combination of Sambonsugi et al. and Wakitani.

Jain et al. add nothing to the cited combination that would render the Applicants' claimed invention obvious. Jain et al. merely disclose a system and a method for segmenting foreground and background portions of digitized images. The Applicants' claimed feature of providing multiple predictions of a pixel value for each pixel in an image sequence is not discussed. Consequently, no motivation or suggestion for this claimed feature of the Applicants' invention is provided. Absent this teaching, motivation or suggestion, Jain et al. cannot render the Applicants' claimed invention obvious (MPEP § 2143.01).

Jain et al. added to the combination of Sambonsugi et al. and Wakitani also still fails to appreciate or recognize the advantages of the Applicants' claimed feature of providing <u>multiple predictions</u> of a <u>pixel value</u> for <u>each pixel</u> in an image sequence.

The Applicants, therefore, submit that obviousness cannot be established since the combination of Sambonsugi et al., Wakitani and Jain et al. fails to teach, disclose, suggest or provide any motivation for the Applicants' claimed feature of providing multiple predictions of a pixel value for each pixel in an image sequence. In addition to explicitly lacking these features, the combination also fails to implicitly disclose, suggest, or provide motivation for this feature. Further, the combination also fails to appreciate advantages of this claimed feature.

Therefore, as set forth in *In re Fine* and MPEP § 2142, the combination of Sambonsugi et al., Wakitani and Jain et al. does not render the Applicants' claimed invention obvious because the references are missing at least one material feature of the Applicants' claimed invention. Consequently, because a prima facie case of

Attorney Docket No: MCS-058-99

obviousness cannot be established due to the lack of "some teaching, suggestion, or incentive supporting the combination", the rejection must be withdrawn. <u>ACS Hospital Systems</u>, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); MPEP 2143.01.

Accordingly, the Applicants respectfully submit that independent claims 1 and 16 are patentable under 35 U.S.C. § 103(a) over the combination Sambonsugi et al. and Wakitani as applied to claim 7, and further in view of Jain et al. based the legal and technical arguments set forth above and below. Moreover, claim 8 depends from independent claim 1 and claim 20 depends from independent claim 16, and thus also are nonobvious over the combination Sambonsugi et al. and Wakitani as applied to claim 7, and further in view of Jain et al. (MPEP § 2143.03). The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claims 8 and 20.

Conclusion

Because the Applicants' claimed invention includes features neither taught, disclosed nor suggested by the art cited in the Office Action, the Applicants respectfully submit that the rejections of claims 1-20, 93 and 94 has been overcome.

The Applicants, therefore, submit that claims 1-20 and 93-98 of the subject application are in condition for immediate allowance. The Examiner, therefore, is respectfully requested to withdraw the outstanding rejections of the claims and to pass all of the claims of this application to issue.

In an effort to expedite and further the prosecution of the subject application, the Applicants kindly invite the Examiner to telephone the Applicants' attorney at (805) 278-8855 if the Examiner has any comments, questions or concerns, wishes to discuss any aspect of the prosecution of this application, or desires any degree of clarification of this response.

Attorney Docket No: MCS-058-99

Respectfully submitted, Dated: September 6, 2004

Craig S. Fischer
Registration No. 42,535
Attorney for Applicants

LYON & HARR, L.L.P. 300 East Esplanade Drive, Suite 800 Oxnard, CA 93036-1274

Tel: (805) 278-8855 Fax: (805) 278-8064